

AMENDMENTS TO THE CLAIMS

1.-27. Canceled

28. (Currently amended) A method for reducing interference in an immunoassay of a sample from a patient that is caused by specific, yet undesirable binding of an antibody detecting presence or amount of a first member of a binding pair in the a sample from a patient to an antibody used in the immunoassay, known or suspected of containing heterophilic antibodies, the method comprising conducting a specific binding reaction comprising binding of the between a first member of a the binding pair with and a second complementary member of the binding pair in an aqueous solution, said solution comprising

a) a buffer to control pH;

b) a compound A selected from the group consisting of: a compound defined by the general formula I $R^1-[CR^2R^3]_p-O-R^4$, wherein R^1 is hydrogen or hydroxy group, R^2 for each unit independently is hydrogen or hydroxy group, R^3 is hydrogen, methyl group, ethyl group, R^4 is hydrogen or alkyl group, p is an integer of from 2 to 10 and q is an integer of from 1 to 100, with the proviso that the compound at least carries two hydroxy groups; a polyol; and a saccharide; and

c) a non-ionic detergent,

wherein said aqueous solution reduces the binding of the antibody in the sample to an antibody used in the immunoassay, thereby reducing interference by the antibody in the sample with an influence of heterophilic antibodies present in said sample on the specific binding reaction of said binding pair, compared to conducting said specific binding reaction in the absence of said solutioncompound.

29. (Previously presented) The method of Claim 28, wherein said aqueous solution further comprises a protein in an amount effective to immunologically block non-specific antibody binding.

30. (Previously presented) The method of Claim 29, wherein the protein is selected from the group consisting of bovine serum albumin, ovalbumin, casein, and fetal bovine serum.

31. (Previously presented) The method of Claim 29, wherein the concentration of the protein is in the range of 0.1 to 2 % w/v.

32. (Previously presented) The method of Claim 28, wherein the solution comprises a salt selected from the group consisting of NaCl, KCl, and NH₄Cl.

33. **(Previously presented)** The method of Claim 28, wherein the solution has an ionic strength of 100 mM to 1.5 M.

34. **(Previously presented)** The method of Claim 28, wherein the buffer is selected from the group consisting of Tris (Tris(hydroxymethyl)-aminomethane, Pipes (Piperazine-1,4-bis-2-ethane sulfonic acid), Mes (4- Morpholino ethane sulfonic acid), Hepes (4-(2-hydroxyethyl)-1-piperazine- ethane sulfonic acid), and phosphate buffer.

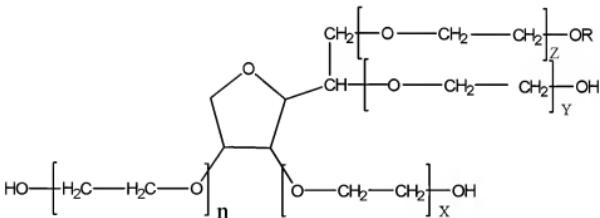
35. **(Previously presented)** The method of Claim 28, wherein the compound A is selected from the group consisting of polyalkylene glycol, polypropylene glycol, propylene glycol, polyethylene glycol, ethylene glycol, monosaccharides, disaccharides, trisaccharides, saccharose, mannose, trehalose, polyol, glycerol and mixtures thereof.

36. **(Previously presented)** The method of Claim 28, wherein the concentration of the compound A is in the range of 0.5 to 25 % v/v.

37. **(Previously presented)** The method of Claim 28, wherein the non- ionic detergent is a compound of the general formula selected from the group consisting of:

a) a substituted phenyl residue having substituents R¹ and R² (R¹-Ph-R²), wherein R¹ is C₁-C₉ a alkyl group, and R² is a -O-[CH₂-CH₂-O]_a-H group, wherein "a" is an integer of 5 to 40, wherein R² in respect to R¹ is in para, meta or ortho position, and

b)



wherein n, x, y and z together is an integer of 5 to 40, R is a fatty acid residue.

38. **(Previously presented)** The method of Claim 28, wherein the non-ionic detergent is selected from the group consisting of Dodecylpoly(ethyleneglycoether)_m, wherein m is an integer of 5 to 40; 1-O-n-Octyl-β-D-glucopyranoside (n-Octylglucoside); Alkylphenolpoly(ethylene-glycoether)_m, wherein m is an integer of 5 to 40; Alkylphenolpoly(ethylene-glycoether)_m, wherein m=11 (Nonidet Page); 1-O-n-Dodecyl-β-D-glucopyranosyl (1-4)alpha-D-glucopyranoside; Dodecylpoly-(ethyleneglycoether)_m, wherein m is

an integer of 5 to 40; Dodecylpoly-(ethyleneglycoether)_m, wherein m = 23 (Brij35®); Poly(oxyethylene)(20)-sorbitane mono fatty acid ester; Poly(oxyethylene)(20)-sorbitane monooleate (Tween®80); Poly(oxyethylene) (20)-sorbitane monolaurate (Tween®20); Poly(oxyethylene)(20)-sorbitane monopalmitate (Tween®40); Poly(oxyethylene)(20)-sorbitane monostearate); Octylphenolpoly(ethylene-glycoether)_m, wherein m is an integer of 5 to 40; and Octylphenolpoly(ethylene-glycoether)_m, wherein m=10 (Triton®X 100).

39. **(Previously presented)** The method of Claim 28, wherein the concentration of the non-ionic detergent is in the range of 0.1 to 1.0 % v/v.

40. **(Previously presented)** The method of Claim 28, wherein the ratio of the non-ionic detergent to the compound A is from 1:15 to 1:25.

41. **(Previously presented)** The method of Claim 28, wherein the aqueous solution does not contain dithiothreitol.

42. **(Previously presented)** The method of Claim 28, wherein the pH is adjusted in the range of 5.6 to 9.6.

43. **(Canceled)**

44. **(Previously presented)** The method of Claim 28, wherein the aqueous solution has the capability of preventing binding of heterophilic antibodies with K_D values of up to 10⁻⁷ M.

45. **(Previously presented)** The method of Claim 28, wherein the aqueous solution has the capability of preventing binding of heterophilic antibodies with K_D values of up to 10⁻⁷ M and reducing the mid-range affinity binding with K_D values in the range of between 10⁻⁷ M and 10⁻⁸ M by at least 90 %.

46. **(Previously presented)** The method of Claim 28, wherein the aqueous solution has the capability of preventing binding of heterophilic antibodies with K_D values of up to 10⁻⁷ M and reducing the mid-range affinity binding with K_D values in the range of between 10⁻⁷ and 10⁻⁹ by at least 90 %.

47. **(Canceled)**

48. **(Previously presented)** The method of Claim 28, wherein said binding pair is an antibody-antigen binding pair.

49. **(Previously presented)** The method of Claim 28, wherein said binding pair is a receptor-ligand binding pair.

50. (Currently amended) The method of Claim 28, wherein said antibody in the sample from the patient is a heterophilic antibodies are human anti-mouse antibody antibodies.